<u>CLAIMS</u>

What is claimed is:

- 1. An apparatus, comprising:
- a data path output unit to output a packet header, the packet header including a first field to extend one of a second field or a third field depending on the contents of the second field.
 - 2. The apparatus of claim 1, wherein the second field is a type field.
 - 3. The apparatus of claim 2, wherein the third field is a length field.
 - 4. The apparatus of claim 3, wherein the first field is used to extend the length field when the type field indicates a memory read request transaction.
 - 5. The apparatus of claim 4, wherein the first field is located between and immediately adjacent to the type field and the length field in the packet header.
 - 6. The apparatus of claim 5, wherein the type field is located in the first byte of the packet header to be output by the data path output unit.
 - 7. An apparatus, comprising:
- a data path input unit to receive a packet header, the packet header including a first field to extend one of a second field or a third field depending on the contents of the second field.

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- 8. The apparatus of claim 7, wherein the second field is a type field.
- 9. The apparatus of claim 8, wherein the third field is a length field.
- 10. The apparatus of claim 9, wherein the first field is used to extend the length field when the type field indicates a memory read request transaction.
- 11. The apparatus of claim 10, wherein the first field is located between and immediately adjacent to the type field and the length field in the packet header.
- 12. The apparatus of claim 11, wherein the type field is located in the first byte of the packet header to be output by the data path output unit.
- 13. A system, comprising:

a transmitting device to transmit a packet header, the packet header including a first field to extend one of a second field or a third field depending on the contents of the second field; and a receiving device couple to the transmitting device, the receiving device to receive the packet header.

- 14. The system of claim 1, wherein the second field is a type field.
- 15. The system of claim 2, wherein the third field is a length field.

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- 16. The system of claim 15, wherein the first field is used to extend the length field when the type field indicates a memory read request transaction.
- 17. The system of claim 16, wherein the first field is located between and immediately adjacent to the type field and the length field in the packet header.
- 18. The system of claim 17, wherein the type field is located in the first byte of the packet header to be output by the data path output unit.

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